MGPI NOD

1. Short term (i.e. lb/ton or lb/hr) BACT limits were not evaluated as part of the BACT analysis submitted. These limits are found in the RBLC and must be evaluated as part of this BACT. Please submit an updated BACT evaluation including short term limits.

RBLC Data on Ethanol Plants: DDG Drying

Company	RBLC ID	Source	Permit Issuance Date	Technology	VOC Limit(s)
Homeland Energy Solutions, LLC, PN 06-672	IA-0089	HRSG from Dryers and Gasification	08/08/2007	TO	98% or 0.006 lb/MMbtu, 6.57 tpy
Archer Daniels Midland	IA-0088	Fermentation Process and Indirect-fired DDGS Dryer	06/29/2007	Route Process Off-gasses through the Dryers Combustion Chamber	98%, 3.16 lb/hr
Southwest Iowa Renewable Energy	IA-0092	DDGS Dryers and Distillation	04/19/2007	TO	99% or 10 ppmv, 5.11 lb/hr
MGP Ingredients of Illinois	IL-0105	Feed Dryer D6500	01/25/2006	Eco-dry system or other comparable system that passes exhaust through the dryer	0.12 lb/MMBtu 3 - hr average
Heartland Corn Products	MN-0062	DDGS Dryer Operation #1	12/22/2005	TO	95%, 8.87 lb/hr
Heartland Corn Products	MN-0062	DDGS Dryer Operation #2 (includes beer stripper, recitifier, side stripper, molecular sieve, evaporator, and storage tanks)	12/22/2005	TO	95%, 15.26 lb/hr

2. Please provide additional explanation concerning the upstream and downstream processes. If this project will not debottleneck existing processes, please include in this explanation a discussion why there will be no debottlenecking due to this project and how any increase in production / increased utilization after this modification would be due to market demand and could have been accommodated.

3. It looks like the DDG goes through the dryer before going to the wet pad based on where the wet cake storage pad is located in the process flow diagram. This doesn't seem correct to me. Please confirm where this is the process flow.

4. Please explain why is the maximum DDG dryer feed rate given as 7.0 tons/hr in the forms and dryer calculations but given as 17.75 tons/hr for the wet cake calculations?

5. In the application it is stated that the facility is installing a new dryer with the same capacity as the total for the existing dryers. However, the total for the existing dryers is 20 tons per hour while 7 tons per hour is given for the new unit. Is this difference due to the existing dryers giving the amount of grain feed into the system vs. the new unit giving the amount of DDG produced? If this is the case, please confirm that the manufacturer emission factors are based on the amount of DDG produced not the feed to the dryer as is currently indicated in the calculations.

6. Are the new conveyors and mixer / inlet screw emissions included in the PTE for the new dryer? There were no calculations for these units so I was unsure if the vendor emission factor included all the new conveyors (both going to and from the dryer) and mixer / inlet screw.

7. Could you please explain how the mixer / inlet screw fits into the process and what occurs here?

8. Could you please explain how the recycle feed moves from the incline drag conveyor to the mixer / inlet screw?

9. Please confirm the following new unit descriptions, fill in the items in yellow, and add any other new pieces of equipment not listed here:

   (a) One (1) DDG dryer, approved in 2015 for construction, identified as EU-39, with a maximum heat input of 45 MMbtu/hr and a maximum throughput of 7.0 tons/hr, with emission controlled by four (4) cyclones (CE-39a) and an 8 MMBtu/hr RTO (CE-39b), and exhausting to stack S-320.

   (b) Three (3) feed conveyors, approved in 2015 for construction, identified as #11 - #13, with a maximum capacity of ??, controlled by ??, and exhausting inside / to stack ??

   (c) One (1) mixer / inlet screw please fill this out as I don't have enough information to guess at this right now.

   (d) One (1) drag conveyor, approved in 2015 for construction, with a maximum capacity of ??, controlled by ??, and exhausting inside / to stack ??

   (e) One (1) wet cake storage pad, approved in 2015 for construction, identified as EU-40, with a maximum storage capacity of ??, controlled by ??, and exhausting inside / to stack ??

   (f) Three (3) product conveyors, approved in 2015 for construction, identified as #21 - #23, with a maximum capacity of ??, controlled by ??, and exhausting inside / to stack ??

   (g) One (1) recycle feed ??, approved in 2015 for construction, identified as ??, with a maximum capacity of ??, controlled by ??, and exhausting inside / to stack ??